

Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276
Renee Cipriano, Director

217/524-3300 October 3, 2001

Certified Mail 7099 3400 0001 2084 5338

Premcor Refining Group Inc. Attn: Forrest B. Lauher, Assistant Vice Presdient 201 East Hawthorne, P. O. Box 7 Hartford, Illinois 62048-0007

Re: 1190500002 -- Madison County

Premcor Refining Group Inc.

ILD041889023

Log No. C-831

Received: July 3, 2001

RCRA Closure

Dear Mr. Lauher:

The closure plan for an alleged hazardous waste container storage area at the above-referenced facility referred to as the "Roll-Off Container Storage Area", submitted June 28, 2001 by Bill R. Irwin, Premcor Refining Group, has been reviewed by the Illinois EPA. This plan was submitted in partial response to Violation Notice No. M-2001-0105 issued by Illinois EPA on April 18, 2001. A drawing showing the location of this area within the Premcor facility is attached.

The plan to complete RCRA closure of the Roll-Off Container Storage Area at the above-referenced facility, prepared by Burns & McDonnell Engineering Company, Inc. is hereby approved subject to the following conditions and modifications:

- 1. In accordance with 35 Ill. Adm. Code 725.213(b), all activities necessary to complete closure of the subject unit(s) must be completed within 180 days of the date of this approval letter. Illinois EPA may approve an extension of this deadline if Premcor Refining Group submits a closure plan modification request which contains information demonstrating that: (1) the closure activities will, of necessity, take longer than 180 days to complete; and (2) Premcor has taken and will continue to take all steps necessary to prevent threats to human health and the environmental from the unit(s), including compliance with all applicable interim status requirements. Any such extension request must be submitted at least thirty days prior to the closure deadline.
 - a. In accordance with 35 Ill. Adm. Code 725.213(c), a closure plan modification request for an extension of the time required to complete closure must be

GEORGE H. RYAN, GOVERNOR

submitted to Illinois EPA at least 30 days prior to the expiration of the 180-day closure period.

- b. The closure plan modification request for an extension of the time required to complete closure must be developed in accordance with Condition 3 below and must also contain a revised schedule which identifies: (1) the various tasks which must be conducted to complete closure of the unit; (2) the estimated time frame for each of the tasks to be completed; and (3) the final date when closure will be completed.
- 2. In accordance with 35 III. Adm. Code 725.215, Premcor must submit a certification that the subject unit has been closed in accordance with the approved plan within 60 days after all closure activities have been completed. This certification must be signed by both a representative of Premcor and an independent licensed professional engineer. The attached form must be used in making this certification. Signatures must meet the requirements of 35 III. Adm. Code 702.126.

The Professional Engineering Practice Act (225 Illinois Compiled Statutes 325/1-325/49) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be licensed under that Act. Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with Paragraph 325/14 of the Professional Engineering Practice Act.

As part of the closure certification, to document the closure activities at your facility in accordance with 35 Ill. Adm. Code 725.215, a Closure Documentation Report must be developed and submitted to Illinois EPA along with the closure certification statement which includes the following:

- a. Background information about the facility overall and the overall closure project.
- b. A description of the unit(s) closed (include scaled maps showing location of unit(s) within facility and layout of unit(s), information related to construction of the unit(s), identification of wastes managed in the unit(s)).

- c. A general discussion of all completed closure activities and what was accomplished as a result of completing these activities.
- d. The volume of waste, waste residue and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- e. Scaled drawings showing the horizontal and vertical boundaries of the extent of any soil removal effort.
- f. A description of the method of waste handling and transport.
- g. The waste manifest numbers.
- h. Copies of the waste manifests.
- i. Information documenting the results of all sampling/analysis efforts. The goal of presenting this information should be to describe, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, this information must include:
 - (1) identification of the reason for the sampling/analysis effort and the goals of the effort;
 - (2) a summary in tabular form of all analytical data, including all quality assurance/quality control data;
 - (3) a scaled drawing showing the horizontal location from which all soil samples were collected;
 - (4) identification of the depth and vertical interval from which each sample was collected;
 - (5) a description of the soil sampling procedures, sample preservation procedures and chain of custody procedures;
 - (6) identification of the test method used and detection limits achieved, including sample preparation, sample dilution (if necessary) and analytical inferences;
 - (7) copies of the final laboratory report sheets, including final sheets reporting all quality assurance/quality assurance dates;

- (8) visual classification of each soil sample in accordance with ASTM D-2488;
- (9) a summary of all procedures used for quality assurance/quality control, including the results of these procedures; and
- (10) a discussion of the data, as it relates to the overall goal of the sampling/analysis effort.
- j. Color photo documentation of closure. Document conditions before, during and after closure.
- k. A chronological summary of closure activities and the cost involved.
- 3. Closure efforts for the Roll-Off Container Storage Area must meet the requirements of 35 Ill. Adm. Code 725, Subpart G. Any variation to the closure activities approved by this letter shall be the subject of a request to modify the approved closure plan which is submitted to Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit(s). In addition, this request must contain information demonstrating that the proposed modifications meet the requirements of 35 Ill. Adm. Code 725, Subpart G. A revised schedule for completing the various tasks necessary to complete closure must be included in this request. Finally, if the proposed modifications will require the closure project to take more than 180 days to complete, then it will be necessary for this modification request to also contain the information identified in Condition 1 above in support of extension requests.
- 4. Soil and groundwater remediation objectives for RCRA projects must be developed in accordance with 35 Ill. Adm. Code 742. Remedial actions must be taken, as appropriate, to ensure that the soils and groundwater remaining at the unit undergoing closure meets these objectives.
 - a. Guidance for the development of the soil remediation objectives is attached.
 - b. If overall closure/remediation efforts of the unit(s) cannot meet these soil objectives, then it will be necessary to closure the unit(s) as landfills in accordance with 35 Ill. Adm. Code 725, Subpart G. In such a case, it will also be necessary to provide at least 30 years of post-closure care for the unit closed as a landfill and eventually obtain a RCRA permit for the facility. Such post-closure care activities must meet the requirements of 35 Ill. Adm. Code 724, Subpart G and 725, Subpart G.

- 5. Section 1.3 of the closure plan indicates approximately 30 cubic yards of contaminated soil has already been removed from the Roll-Off Container Area and Section A.1.1 of the Closure Sampling Plan. Attachment A to the closure plan contains the proposed closure sampling plan to be carried out at the unit to determine if any contaminated soil remains there. This closure sampling plan is hereby approved subject to the following conditions and modifications:
 - a. No samples to be analyzed for volatile organic compounds may be collected from a hand auger; they must be obtained using a tube sampling device which does not expose the soil to the atmosphere or agitate it in any manner;
 - b. Sample locations must be biased toward any stained areas;
 - c. Samples must be collected from 3"-6" below the ground surface which resulted after the removal of contaminated soil from the area as mentioned above;
 - d. The procedures used to collect and analyze all samples must be carried out in accordance with the provisions of this letter.
- 6. The following procedures must be utilized in the collection of all soil samples:
 - a. Collection of all soil samples must be carried out in accordance with ASTM or SW-846 procedures. Acceptable ASTM procedures include:
 - (1) Method D 4700-91 (Method for Soil Sampling from the Vadose Zone);
 - (2) Method D 6001-96 (Guide for Direct-Push Sampling for Geoenvironmental Investigations); and
 - (3) Method 6169-97 (Guide for Selection of Soil and Rock Sampling Devices Used with Drill Rigs for Environmental Investigations).
 - b. Soil samples collected for volatile organic compound (VOCs) analysis require specialized sampling and handling procedures, as specified in Attachment A of Illinois EPA's RCRA closure plan guidance document or Method 5035 of SW-846.
 - c. All soil encountered during the sampling effort must be field classified in accordance with ASTM D-2488.

- d. Soil samples must be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.
- e. Horizontal/vertical locations where samples are collected must be biased, as appropriate, to stained/discolored areas or areas where contamination is suspected to be present (such as the highest field screening results).
- f. Soil which is encountered in an area where VOC contamination is a concern must be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory must not be field-screened.
- 7. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts.
- 8. All soil samples shall be analyzed individually (i.e., no compositing). Analytical procedures shall be conducted in accordance with <u>Test Methods for Evaluating Solid Wastes</u> (SW-846), Third Edition and Finalized Updates. When a SW-846 analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Illinois EPA. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. Each soil sample must be analyzed for: (1) benzene, toluene, ethylbenzene and xylene; (2) polynuclear aromatic hydrocarbons using Method 8310 of SW-846; and (3) chromium, cyanide, nickel, lead and pH.
- 9. If contaminated soil is encountered during any required soil sampling/analysis effort, then a sufficient number of additional samples should be collected and analyzed to clearly determine the horizontal and vertical limits of the soil which exceed the established remediation objectives in and around the Roll-Off Container Storage Area. The procedures used to collect and analyze these samples must be in accordance with:

 (1) those approved by this letter; and (2) Section 2.4.5 of the Illinois EPA's RCRA closure plan instructions (November 1994).
- 10. The attached form entitled RCRA Interim Status Closure and Post-Closure Care Plans
 General Form (LPC-PA18) must be completed and accompany all information submitted to the Illinois EPA associated with the closure activities described in this letter. As noted on this form, two copies must accompany the original of all submittals, so that the information submitted can be distributed, as necessary to Illinois EPA personnel and regional offices.

- 11. If groundwater is encountered during any soil sampling activities or soil removal effort prior to reaching soil which meets the remediation objectives, then a plan to investigate for potential groundwater contamination must be submitted to the Illinois EPA for review and approval. Such a plan must be submitted within sixty (60) days after the date that the analytical results are received which indicate that soil contamination extends to the water table. In addition, the Illinois EPA shall be notified in writing of this discovery within five (5) days after these analytical results are received.
- 12. Contaminated soil may be excavated and disposed off-site at any time during closure. The goal of any such effort should be to remove all soil which exceeds the established cleanup objectives.
- 13. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then all contaminated soil which is excavated for off-site disposal must be managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
- 14. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then soil samples must be collected for analysis from the bottom and sidewalls of the final excavation from which contaminated soil was removed. This sampling analysis effort necessary to demonstrate that the remaining soil meets the established remediation objectives.
 - a. A grid system as set forth in Section 2.6.1 of the Illinois EPA's closure plan instructions should be established over the excavation.
 - b. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.
 - c. Samples should be collected 3"-9" below the ground surface at each grid intersection around the excavation perimeter. Samples should also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.
 - d. Collection/analysis of all required samples must be in accordance with the procedures approved in this letter.
 - e. Soil samples which must be analyzed for volatile organic compounds shall be collected using Attachment A of the Illinois EPA's RCRA closure plan instructions. In addition, such samples must be collected 6"-12" beneath the

floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

- f. No random sampling shall be conducted to verify that the cleanup objectives have been met.
- 15. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established remediation objectives. Additional samples must be collected and analyzed in accordance with Condition 14 above from areas where additional soil has been removed.
- 16. If Premcor Refining Group Inc. determines that soil excavation and off-site disposal is not the preferred remedial action for this closure, then a closure plan modification request developed in accordance with Condition 3 must be submitted to Illinois EPA for review and approval.
- 17. If clean closure cannot be achieved pursuant to 35 Ill. Adm. Code 725, Subpart G, then a modified closure plan and a post-closure plan prepared pursuant to these regulations must be submitted to the Illinois EPA for review and approval within 60 days of such a determination.
- 18. All references to the "Illinois EPA's RCRA closure plan instructions" refer to the document entitled Guidance for Preparing RCRA Closure Plans (November 1994).
- 19. All references to "SW-846" refer to the USEPA document entitled <u>Test Methods for</u> Evaluating Solid Wastes, Third Edition and any finalized updates.
- 20. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 725.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 21. The approved closure cost estimate for this project is \$53,715 (2001 dollars). This estimate must be updated if it does not reflect the costs of required closure activities, based upon modifications to the approved closure plan for the Roll-Off Container Storage Area.
- 22. Under the provisions of 29 CFR 1910, cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard.

Mr. Forrest B. Lauher C-831 Page 9

These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

- 23. All waste generated as part of this project must be managed in accordance with the requirements of 35 Ill. Adm. Code 721, 722, 723, 728, 808 and 809.
- 24. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 Ill. Adm. Code 722.134) only applies to containers and tanks.
- 25. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Illinois EPA by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment and/or disposal during any calendar year. All non-hazardous special wastes that are shipped to a facility located outside the State of Illinois that result from this project are subject to annual reporting as required in Section 22.01 of the Illinois Environmental Protection Act and 35 Ill. Adm. Code 809.601(g) and shall be reported to Illinois EPA by February 1 of the following year. Additional information and appropriate report forms may be obtained from the Illinois EPA by contacting:

Administrative Compliance Unit Division of Land Pollution Control #24 Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62794-9276

26. The approval of this closure plan does not resolve any of this facility's possible violations of 35 IAC 725, Subpart H (Financial Requirements). Any such possible violation will not be resolved (and the facility will remain out of compliance) until: (1) adequate financial assurance is established; or (2) the Illinois EPA approves the certification of final closure for the facility.

Mr. Forrest B. Lauher C-831 Page 10

27. The approval of this closure plan will not: (1) resolve any of this facility's possible violations of the Illinois Environmental Protection Act and/or 35 Ill. Adm. Code, Subtitle G: Waste Disposal; or (2) prevent the USEPA or Illinois EPA from pursuing enforcement proceedings and monetary penalties as a result of the afore-mentioned possible violations.

This action shall constitute Illinois EPA's final action on the subject submittal. Within 35 days after the date of mailing of Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal(s) or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding this matter, please contact Benjamen Ige at 217/782-8061.

Sincerely,

Joyce L. Munie/P.E.

Manager, Permit Section

Bureau of Land

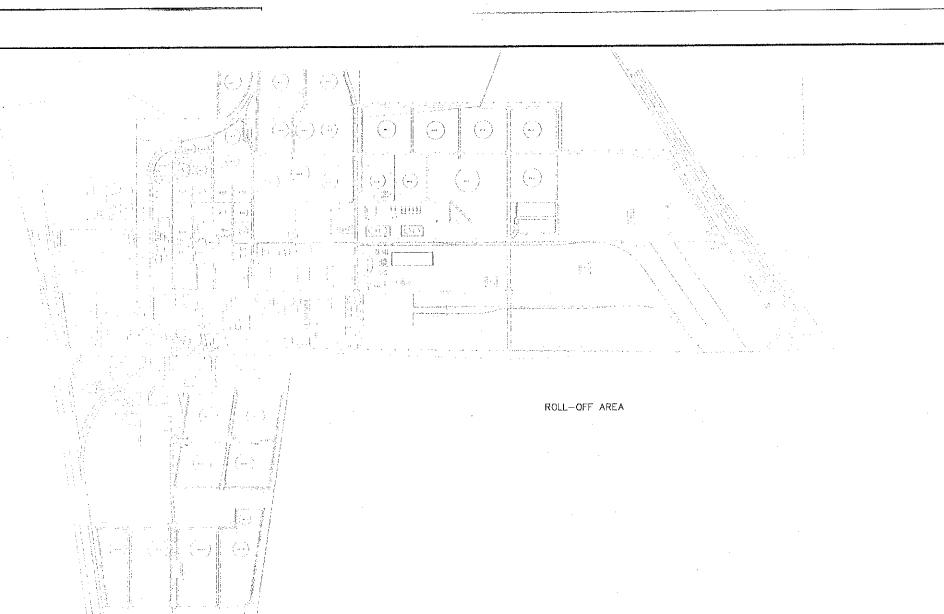
JLM:BAI:bjh\20011504s.doc

Attachments: Site Layout Map

Closure Certification Statement

LPC PA-18

cc: USEPA Region V -- Harriet Croke



SCALE IN FEET





Figure 1–2 SITE MAP ROLL-OFF AREA PREMCOR REFINERY HARTFORD, ILLINOIS

Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276
Thomas V. Skinner, Director

USE OF RCRA INTERIM STATUS CLOSURE AND POST-CLOSURE CARE PLANS GENERAL FORM

LPC-PA18

Attached is a general form which must be included with all RCRA interim status closure plans, post-closure plans and modification requests of such plans submitted after January 1, 1993. This form contains general information related to the facility involved in RCRA closure and/or post-closure activities which will allow the Agency to process such plans more efficiently. In addition, it will also provide the facility undergoing closure with a mechanism for providing the necessary certification for such submittals.

The LPC-PA18 form should be attached to the cover letter which transmits any document associated with RCRA closure or post-closure to the Agency. If desired, it can be directly incorporated into any report which is being submitted in lieu of being attached to the cover letter. However, if it is placed in a report, it must appear directly after the Table of Contents, so that it is easily accessible to Agency personnel.

The Agency reserves the right to return any RCRA closure plan, post-closure plan, or modification request submitted after January 1, 1993 which is not accompanied by the LPC-PA18 form.

The form should be self-explanatory as it relates to the information which should be provided. However, if you have any questions regarding the use of this form, please contact anyone in the Corrective Action Unit of the Permit Section at 217/524-3300.

(November 1992)

JM:jab\002712p.doc

IL 532-2106 LPC 464 4/2000



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. Box 19276, Springfield, Illinois 62794-9276 THOMAS V. SKINNER, DIRECTOR

RCRA INTERIM STATUS CLOSURE AND POST-CLOSURE CARE PLANS GENERAL FORM LPC-PA18

THIS FORM MUST ACCOMPANY ANY RCRA INTERIM-STATUS CLOSURE AND/OR POST-CLOSURE CARE PLANS OR MODIFICATION REQUEST SUBMITTED TO THE DIVISION OF LAND POLLUTION CONTROL. THE ORIGINAL AND TWO COPIES OF ALL DOCUMENTS SUBMITTED MUST BE PROVIDED.

FACILITY IDENTIFICATION (Informatio closure plan submittal)	n about the facility w	nere the units are locate	d which are addi	essed in this
Name:	***************************************	County:		
Street Address:		Site # (IEPA):		
City:		Site No. (USEPA):		
OWNER INFORMATION			R INFORMATIO	
Name:				
Mailing				
Address:				
		A TO CHECK I MITTER		
Contact Name:		A CONTRACTOR OF THE PROPERTY O		
Contact Title:				
Phone #:				
TYPE OF SUBMISSION (check applicable	e item and provide req	uested information, as a	pplicable)	
Original (New) Closure Plan	Log No. of	Most Recent Agency sapproval Letter		
Original (New) Post-Closure Plan	Approvado	sapprovar Detter		
Response to Disapproval letter	Date of Mo	st Recent Agency		
Modification Request	Approval/Di	sapproval Letter		
Additional Information for/	/ Submittal (Log	Noif kno	own)	
Does this submittal contain groundwater inf				
(IF YES, PLEASE INCLUDE ONE ADDI				
DESCRIPTION OF SUBMITTAL: (briefl				
		ng suomitteu)		•
LIST OF DOCUMENTS SUBMITTED (id	dentify all documents i	n this submittal, includi	ng the cover lett	er)
			·	
UNITS UNDERGOING CLOSURE (pleas whether they are on the RCRA Part A for t	e identify what type o the facility)	f units are addressed in	the plan, their ca	apacities and
A Toria	Unit Code	Number of	Canacity	On Part A
<u>Unit</u>	Code	Units Closing	<u>Capacity</u>	(1/11)
Storage: Container (barrel, drum, etc.)	S01			
Tank	S02			
Waste Pile	S03			
Surface Impoundment	S04			

Surface Impoundment

UNITS UNDERGOING CLOSURE (continued)

LPC PA-18 (Page 2)

<u>Unit</u>	Unit <u>Code</u>	Number of Units Closing	Capacity	On Part A (Y/N)
Treatment:				
Tank	T01			
Surface Impoundment	T02			
Incinerator	T03			
Other (explain)	T04			
Disposal:	•			
Landfill	D80			
Land Application	D81			***************************************
Surface Impoundment	D83			

CERTIFICATION AND SIGNATURE (Must be completed for all submittals. Certification and signature requirements are set forth in 35 IAC 702.126. Any submittal involving engineering plans, specifications and calculations as defined in the Illinois Professional Engineering Practice Act (225 ILCS 325) and 68 Ill. Adm. Code 1380 must be signed and certified by an Illinois licensed professional engineer.)

All closure plans, post-closure plans and modifications must be signed by the person representing the owner/operator designated below or by a duly authorized representative of that person:

- If the owner/operator is a Corporation By a principal executive officer of at least the level of vice-president.
 If the owner/operator is a Partnership or Sole Proprietorship By a general partner or the proprietor, respectively.
 If the owner/operator is a Government By either a principal executive officer or a ranking elected official.

A person is a duly authorized representative only if:

- 1. the authorization is made in writing by a person described above; and
- 2. is submitted with this application (a copy of a previously submitted authorization can be used).

<u>CERTIFICATION STATEMENT</u> - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner Signature:	
Title:	(Date)
Operator Signature:	
Title:	Date)
Engineer Signature: (if necessary)	(Date)
Engineer Name:	
Engineer Address:	·
	· ·
Engineer Phone No.:	
JM:bjh\97763S.WPD	This Agency is authorized to

This Agency is authorized to require this information under Illinois Revised Statutes, 1979 Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.



Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276
Renee Cipriano, Director

217/524-3300 October 3, 2001

<u>Certified Mail</u> 7099 3400 0001 2084 5369

Premcor Refining Group Inc.

Attn: Forrest B. Lauher, Assistant Vice Presdient

201 East Hawthorne, P. O. Box 7 Hartford, Illinois 62048-0007

Re:

1190500002 – Madison County

Premcor Refining Group Inc.

ILD041889023 Log No. C-830

Received: July 3, 2001

RCRA Closure

Dear Mr. Lauher:

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 - (8) visual classification of each soil sample in accordance with ASTM D-2488;

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- j. Color photo documentation of closure. Document conditions before, during and after closure.
- k. A chronological summary of closure activities and the cost involved.
- 3. Closure efforts for the Dissolved Air Flotation Unit Area at this facility must meet the requirements of 35 Ill. Adm. Code 725, Subpart G. Any variation to the closure activities approved by this letter shall be the subject of a request to modify the approved closure plan which is submitted to Illinois EPA for review and approval. Any such request must contain detailed information regarding the proposed modifications and the procedures which will be followed to complete closure of the unit(s). In addition, this request must contain information demonstrating that the proposed modifications meet the requirements of 35 Ill. Adm. Code 725, Subpart G. A revised schedule for completing the various tasks necessary to complete closure must be included in this request. Finally, if the proposed modifications will require the closure project to take more than 180 days to complete, then it will be necessary for this modification request to also contain the information identified in Condition 1 above in support of extension requests.
- 4. Soil and groundwater remediation objectives for RCRA projects must be developed in accordance with 35 Ill. Adm. Code 742. Remedial actions must be taken, as appropriate, to ensure that the soils and groundwater remaining at the unit undergoing closure meets these objectives.
 - a. Guidance for the development of the soil remediation objectives is attached.
 - b. If overall closure/remediation efforts of the unit(s) cannot meet these soil objectives, then it will be necessary to closure the unit(s) as landfills in accordance with 35 Ill. Adm. Code 725, Subpart G. In such a case, it will also be necessary to provide at least 30 years of post-closure care for the unit closed as a landfill and eventually obtain a RCRA permit for the facility. Such post-closure care activities must meet the requirements of 35 Ill. Adm. Code 724, Subpart G and 725, Subpart G.
- 5. Section 1.3 of the closure plan indicates that the area undergoing closure is located between the DAF unit and the flow unit at the facility. It goes on to indicate

approximately 5-6 cubic yards of crushed rock has been removed from the area, triple rinsed (as releases of refinery waste were observed in this area) and then placed backed in the area. Finally, this section indicates that a concrete base is present beneath the crushed rock.

- a. All stained crushed rock must be removed from the area and either: (1) triplerinsed; or (2) sent off-site for disposal.
- b. All crushed rock must be removed from the area to expose the underlying concrete base. Once the concrete base has been exposed, the procedures set forth in Conditions 6 and 7 below must be followed.
- 6. The concrete base of the Dissolved Air Flotation Unit Area shall be visually inspected, photographed and any residue adhering to the surface must be removed by scraping and/or brushing. Following this, the concrete base must be steam cleaned and triple rinsed. All wash and rinse water shall be collected and managed in accordance with the requirements of (1) 35 Ill. Adm. Code, Subtitle G: Waste Disposal; and/or (2) 35 Ill. Adm. Code, Subtitle C: Water Pollution.

After cleaning the concrete base, an independent licensed professional engineer shall inspect the integrity of the concrete surfaces. These surfaces shall be inspected for cracks which penetrate through the concrete surface. In addition, all construction joints must be inspected to ensure they are watertight. This inspection must be carried out in accordance with standards and recommendations of professional/technical entities such as the American Concrete Institute, the Portland Cement Association the American Society for Testing and Materials, the American Society of Civil Engineers, etc. which relate to the ability of concrete structures to contain liquids.

The results of the integrity inspection shall be: (1) submitted in the form of a report; (2) included in the closure documentation report required by Condition 1 above, and (3) certified in accordance with 35 Ill. Adm. Code 702.126 by the engineer. The report must include: (1) the results of the inspection; (2) scaled drawings showing the location of all cracks and construction joints observed during the investigation; (3) conclusions reached regarding any cracks or construction joints observed in the areas of concern; (4) justification for the conclusions reached (e.g., information must be provided which indicates that any construction joints in the areas of concern are indeed watertight); and (5) photographs to support the conclusions reached.

7. If joints, cracks or other defects are found in the concrete base during the inspection required by Condition 6 above which would potentially allow hazardous waste or hazardous constituents to migrate through them, then soil samples must be collected from

beneath them to determine if hazardous waste or hazardous constituents have been released to the underlying soil. This sampling/analysis effort shall be carried out in accordance to the below listed procedures.

- a. Samples must be collected from at least one location along each joint or crack that provides a potential for hazardous waste or hazardous constituents to migrate to underlying soil. If the crack/joint is more than 15' long, then samples must be collected from along crack/joint at 15' intervals. Such locations shall be biased to stained areas or low-lying areas where spills would tend to accumulate.
- b. The procedures used to collect and analyze all samples shall be carried out in accordance with the procedures approved by this letter.
- c. Samples shall be collected from 0"-6" and from 18"-24" below the subgrade/natural soil interface.
- 8. If the concrete base exposed in accordance with Condition 5 above does not extend to the boundaries of the DAF Unit Area as shown in Figure 3-1 of the closure plan, then it will be necessary to collect and analyze soil samples from around the perimeter of the concrete base to verify that there has been no releases from the area. This sampling and analysis effort must be carried out in accordance with Conditions 7, 9, 10, 11 and 12 of this letter.
- 9. The following procedures must be utilized in the collection of all soil samples:
 - a. Collection of all soil samples must be carried out in accordance with ASTM or SW-846 procedures. Acceptable ASTM procedures include:
 - (1) Method D 4700-91 (Method for Soil Sampling from the Vadose Zone);
 - (2) Method D 6001-96 (Guide for Direct-Push Sampling for Geoenvironmental Investigations); and
 - (3) Method 6169-97 (Guide for Selection of Soil and Rock Sampling Devices Used with Drill Rigs for Environmental Investigations).
 - b. Soil samples collected for volatile organic compound (VOCs) analysis require specialized sampling and handling procedures, as specified in Attachment A of Illinois EPA's RCRA closure plan guidance document or Method 5035 of SW-846.
 - c. All soil encountered during the sampling effort must be field classified in accordance with ASTM D-2488.

- d. Soil samples must be collected continuously at several locations to provide information regarding the shallow geology of the area where the investigation is being conducted.
- e. Horizontal/vertical locations where samples are collected must be biased, as appropriate, to stained/discolored areas or areas where contamination is suspected to be present (such as the highest field screening results).
- f. Soil which is encountered in an area where VOC contamination is a concern must be field-screened for VOCs. However, the actual samples collected for analysis at the laboratory must not be field-screened.
- 10. Quality assurance/quality control procedures which meet the requirements of SW-846 must be implemented during all required sampling/analysis efforts.
- 11. All soil samples shall be analyzed individually (i.e., no compositing). Analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes (SW-846), Third Edition and Finalized Updates. When a SW-846 analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Illinois EPA. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. Each soil sample must be analyzed for: (1) benzene, toluene, xylene, ethylbenzene; and (2) polynuclear aromatic hydrocarbons using Method 8310 of SW-846; and (3) chromium, cyanide, nickel, lead and pH.
- 12. If contaminated soil is encountered during any required soil sampling/analysis effort, then a sufficient number of additional samples should be collected and analyzed to clearly determine the horizontal and vertical limits of the soil which exceed the established remediation objectives in and around the Dissolved Air Flotation Unit Area. The procedures used to collect and analyze these samples must be in accordance with: (1) those approved by this letter; and (2) Section 2.4.5 of the Illinois EPA's RCRA closure plan instructions (November 1994).
- 13. The attached form entitled RCRA Interim Status Closure and Post-Closure Care Plans
 General Form (LPC-PA18) must be completed and accompany all information submitted
 to the Illinois EPA associated with the closure activities described in this letter. As noted
 on this form, two copies must accompany the original of all submittals, so that the
 information submitted can be distributed, as necessary to Illinois EPA personnel and
 regional offices.

- 14. If groundwater is encountered during any soil sampling activities or soil removal effort prior to reaching soil which meets the remediation objectives, then a plan to investigate for potential groundwater contamination must be submitted to the Illinois EPA for review and approval. Such a plan must be submitted within sixty (60) days after the date that the analytical results are received which indicate that soil contamination extends to the water table. In addition, the Illinois EPA shall be notified in writing of this discovery within five (5) days after these analytical results are received.
- 15. Contaminated soil may be excavated and disposed off-site at any time during closure. The goal of any such effort should be to remove all soil which exceeds the established cleanup objectives.
- 16. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then all contaminated soil which is excavated for off-site disposal must be managed in accordance with 35 Ill. Adm. Code, Subtitle G: Waste Disposal.
- 17. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then soil samples must be collected for analysis from the bottom and sidewalls of the final excavation from which contaminated soil was removed. This sampling analysis effort necessary to demonstrate that the remaining soil meets the established remediation objectives.
 - a. A grid system as set forth in Section 2.6.1 of the Illinois EPA's closure plan instructions should be established over the excavation.
 - b. Samples should be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.
 - c. Samples should be collected 6"-12" below the ground surface at each grid intersection around the excavation perimeter. Samples should also be collected at the midpoint of the excavation wall at each grid intersection along the excavation perimeter.
 - d. Collection/analysis of all required samples must be in accordance with the procedures approved in this letter.
 - e. Soil samples which must be analyzed for volatile organic compounds shall be collected using Attachment A of the Illinois EPA's RCRA closure plan instructions. In addition, such samples must be collected 6"-12" beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

- f. No random sampling shall be conducted to verify that the cleanup objectives have been met.
- 18. If removal and off-site disposal is the remedial action chosen for any soil contamination found, then additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established remediation objectives. Additional samples must be collected and analyzed in accordance with Condition 17 above from areas where additional soil has been removed.
- 19. If Premcor Refining Group Inc. determines that soil excavation and off-site disposal is not the preferred remedial action for this closure, then a closure plan modification request developed in accordance with Condition 3 must be submitted to Illinois EPA for review and approval.
- 20. If clean closure cannot be achieved pursuant to 35 Ill. Adm. Code 725, Subpart G, then a modified closure plan for closing the unit as a landfill and an associated post-closure plan prepared pursuant to these regulations must be submitted to the Illinois EPA for review and approval within 60 days of such a determination.
- 21. All references to the "Illinois EPA's RCRA closure plan instructions" refer to the document entitled Guidance for Preparing RCRA Closure Plans (November 1994).
- 22. All references to "SW-846" refer to the USEPA document entitled <u>Test Methods for</u> Evaluating Solid Wastes, Third Edition and any finalized updates.
- 23. If the Illinois EPA determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code 725.211, the Illinois EPA reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 24. The approved closure cost estimate for this project is \$32,645 (2001 dollars). This estimate must be updated as necessary if it does not reflect the costs of required closure activities, based upon modifications made to the approved closure plan for the Dissolved Air Flotation Unit Area.
- 25. Under the provisions of 29 CFR 1910, cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of

Mr. Forest B. Lauher C-831 Page 10

three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.

- 26. All waste generated as part of this project must be managed in accordance with the requirements of 35 Ill. Adm. Code 721, 722, 723, 728, 808 and 809.
- 27. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 III. Adm. Code 722.134) only applies to containers and tanks.
- 28. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Illinois EPA by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment and/or disposal during any calendar year. All non-hazardous special wastes that are shipped to a facility located outside the State of Illinois that result from this project are subject to annual reporting as required in Section 22.01 of the Illinois Environmental Protection Act and 35 Ill. Adm. Code 809.601(g) and shall be reported to Illinois EPA by February 1 of the following year. Additional information and appropriate report forms may be obtained from the Illinois EPA by contacting:

Administrative Compliance Unit Division of Land Pollution Control #24 Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62794-9276

- 29. The approval of this closure plan does not resolve any of this facility's possible violations of 35 IAC 725, Subpart H (Financial Requirements). Any such possible violation will not be resolved (and the facility will remain out of compliance) until: (1) adequate financial assurance is established; or (2) the Illinois EPA approves the certification of final closure for the facility.
- 30. The approval of this closure plan will not: (1) resolve any of this facility's possible violations of the Illinois Environmental Protection Act and/or 35 Ill. Adm. Code, Subtitle G: Waste Disposal; or (2) prevent the USEPA or Illinois EPA from pursuing enforcement proceedings and monetary penalties as a result of the afore-mentioned possible violations.

Mr. Forest B. Lauher C-831 Page 11

This action shall constitute Illinois EPA's final action on the subject submittal. Within 35 days after the date of mailing of Illinois EPA's final decision, the applicant may petition for a hearing before the Illinois Pollution Control Board to contest the decision of Illinois EPA, however, the 35-day period for petitioning for a hearing may be extended for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Illinois EPA within the 35-day initial appeal period.

Work required by this letter, your submittal(s) or the regulations may also be subject to other laws governing professional services, such as the Illinois Professional Land Surveyor Act of 1989, the Professional Engineering Practice Act of 1989, the Professional Geologist Licensing Act, and the Structural Engineering Licensing Act of 1989. This letter does not relieve anyone from compliance with these laws and the regulations adopted pursuant to these laws. All work that falls within the scope and definitions of these laws must be performed in compliance with them. The Illinois EPA may refer any discovered violation of these laws to the appropriate regulating authority.

Should you have any questions regarding this matter, please contact Benjamen Ige at 217/782-8061.

Sincerely,

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

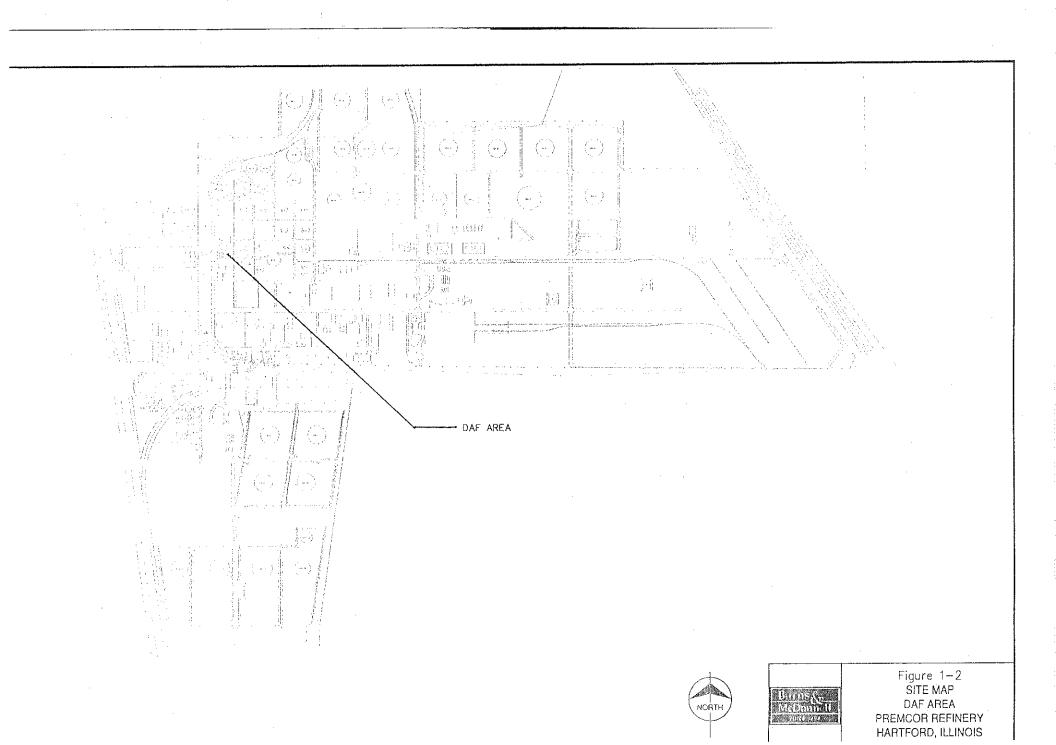
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Attachments: Site Layout Map

Closure Certification Statement

LPC PA-18

cc: USEPA Region V -- Harriet Croke



Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276
Thomas V. Skinner, Director

USE OF RCRA INTERIM STATUS CLOSURE AND POST-CLOSURE CARE PLANS GENERAL FORM

LPC-PA18

Attached is a general form which must be included with all RCRA interim status closure plans, post-closure plans and modification requests of such plans submitted after January 1, 1993. This form contains general information related to the facility involved in RCRA closure and/or post-closure activities which will allow the Agency to process such plans more efficiently. In addition, it will also provide the facility undergoing closure with a mechanism for providing the necessary certification for such submittals.

The LPC-PA18 form should be attached to the cover letter which transmits any document associated with RCRA closure or post-closure to the Agency. If desired, it can be directly incorporated into any report which is being submitted in lieu of being attached to the cover letter. However, if it is placed in a report, it must appear directly after the Table of Contents, so that it is easily accessible to Agency personnel.

The Agency reserves the right to return any RCRA closure plan, post-closure plan, or modification request submitted after January 1, 1993 which is not accompanied by the LPC-PA18 form.

The form should be self-explanatory as it relates to the information which should be provided. However, if you have any questions regarding the use of this form, please contact anyone in the Corrective Action Unit of the Permit Section at 217/524-3300.

(November 1992)

JM:jab\002712p.doc

IL 532-2106 LPC 464 4/2000

GEORGE H. RYAN, GOVERNOR



Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276
Thomas V. Skinner, Director

RCRA INTERIM STATUS CLOSURE AND POST-CLOSURE CARE PLANS GENERAL FORM LPC-PA18

THIS FORM MUST ACCOMPANY ANY RCRA INTERIM-STATUS CLOSURE AND/OR POST-CLOSURE CARE PLANS OR MODIFICATION REQUEST SUBMITTED TO THE DIVISION OF LAND POLLUTION CONTROL. THE ORIGINAL AND TWO COPIES OF ALL DOCUMENTS SUBMITTED MUST BE PROVIDED.

FACILITY IDENTIFICATION (Information about the facility where the units are located which are addressed in this

closure plan submittal)		•		
Name:		County:		
Street Address:		Site # (IEPA):		
City:		Site No. (USEPA):		
OWNER INFORMATION			R INFORMATION	
Name:		The second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a section in the second section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the se		
				
Mailing Address:				
Contact Name:				
Contact Title:				
Phone #:				
TYPE OF SUBMISSION (check applicable i	tem and provide re	equested information, as a	pplicable)	
Original (New) Closure Plan	Log No. c	of Most Recent Agency		
Original (New) Post-Closure Plan		Disapproval Letter		
Response to Disapproval letter	Date of M Approval/	fost Recent Agency Disapproval Letter		
Modification Request				
Additional Information for / /	Submittal (Lo	g No if kn	own)	
Does this submittal contain groundwater infor-	mation: Ye	es;No		
(IF YES, PLEASE INCLUDE ONE ADDIT:	IONAL COPY OF	SUBMITTAL)		
DESCRIPTION OF SUBMITTAL: (briefly				
DESCRIPTION OF SOUTH TAB. (Officing	describe what is o	ong sustinuou)		
LIST OF DOCUMENTS SUBMITTED (ide	ntify all documents	s in this submittal, includ	ing the cover lett	er)
UNITS UNDERGOING CLOSURE (please	identify what type	of units are addressed in	the plan, their ca	macities and
whether they are on the RCRA Part A for the	facility)		, , , , , , , , , , , , , , , , , , , ,	•
	Unit	Number of	0 1	On Part A
<u>Unit</u>	Code	Units Closing	Capacity	(Y/N)
Storage:	S01			
Container (barrel, drum, etc.) Tank	S02	The second secon		
Waste Pile	S03			-
Surface Impoundment	S04			***************************************

PROXELLEY ON PRODUCTION PARIS

UNITS UNDERGOING CLOSURE (continued)

LPC PA-18 (Page 2)

<u>Unit</u>	Unit <u>Code</u>	Number of <u>Units Closing</u>	Capacity	On Part A (Y/N)
Treatment:	mo t			
Tank	T01			
Surface Impoundment	T02			
Incinerator	T03			
Other (explain)	T04			
Disposal:				
Landfill	D80			
Land Application	D81			
Surface Impoundment	D83			
1			***	

<u>CERTIFICATION AND SIGNATURE</u> (Must be completed for all submittals. Certification and signature requirements are set forth in 35 IAC 702.126. Any submittal involving engineering plans, specifications and calculations as defined in the Illinois Professional Engineering Practice Act (225 ILCS 325) and 68 III. Adm. Code 1380 must be signed and certified by an Illinois licensed professional engineer.)

All closure plans, post-closure plans and modifications must be signed by the person representing the owner/operator designated below or by a duly authorized representative of that person:

- If the owner/operator is a Corporation By a principal executive officer of at least the level of vice-president.
 If the owner/operator is a Partnership or Sole Proprietorship By a general partner or the proprietor, respectively.
 If the owner/operator is a Government By either a principal executive officer or a ranking elected official.

A person is a duly authorized representative only if:

- 1. the authorization is made in writing by a person described above; and
- 2. is submitted with this application (a copy of a previously submitted authorization can be used).

CERTIFICATION STATEMENT - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner Signature:		
Title		(Date)
Operator Signature:		
Title:		Date)
Engineer Signature: (if necessary)	·	(Date)
Engineer Name:		Engineer Seal:
Engineer Address:		
Engineer Phone No.:		

JM:bjh\97763S.WPD

This Agency is authorized to require this information under Illinois Revised Statutes, 1979 Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

217/524-3300

THOMAS V. SKINNER, DIRECTOR

July 18, 2001

CERTIFIED MAIL #: 7099 3400 0001 1279 0875 RETURN RECEIPT REQUESTED

Premcor Refining Group Inc. 201 E. Hawthorne Avenue, Box 7 Hartford, Illinois 62048

Re: 1190500002 -- Madison County

Premcor Refining Corporation

ILD041889023 Log No. C-830 RCRA Closure File

Dear Environmental Coordinator:

As you are aware, we are currently evaluating the request for closure of certain hazardous waste management units at the above-referenced facility which is regulated under the Resource Conservation and Recovery Act (RCRA).

Under Section 206 and Section 233 (copies enclosed) of the Hazardous and Solid Waste Amendments of 1984, all facilities "seeking a permit" (taken to mean interim status facilities) must provide for corrective action for all releases of hazardous waste or constituents from any <u>solid</u> waste management unit, regardless of the time at which waste was placed in the Unit. Please note that both hazardous and non-hazardous wastes can meet the definition of solid waste under 40 CFR 261.2.

Consequently, we must determine whether such releases have ever occurred at the facility site. If they have, we must ensure that any necessary corrective actions either have been taken, or will be taken, pursuant to a decision on your closure plan. An important part of our determination includes your willingness (or unwillingness) to complete the enclosed certification form. Please read it carefully, complete it, and either sign and return it, or return it to us unsigned with a cover letter of explanation, within 30 days of the date of this letter.

Please call the Permit Section at 217/524-3300 if you have any questions or wish to discuss this matter further.

Sincerely,

Joyce L. Munie, P.E.

Manager, Permit Section

Bureau of Land

JLM:NGK:BAI:bjh\1661DOC

Enclosures

cc: Harriet Croke, USEPA - Region V

sepech Munie

GEORGE H. RYAN, GOVERNOR

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

OFFICE OF RCPA

WASTE MANAGEMENT DEPA, RECTON V

217/524-3300

April 15, 1993

Mr. George J. Hamper Chief, Illinois Section RCRA Permitting Branch (HRP-8J) U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604

Re: 1190500002 -- Madison County

Clark Oil and Refining Corporation

ILD041889023 RCRA Closure

Dear George:

In accordance with a recent telephone conversation between you and Jerry Kuhn of my staff, please be advised that IEPA will continue to review and directly respond to Clark Oil's submittals on closure of surface impoundments that may have received F037 and F038 listed hazardous waste. Although IEPA has not yet been delegated authority by USEPA to administer the RCRA program for these waste codes, the waste codes have been incorporated into the State of Illinois' Rules and Regulations under 35 IAC 721.1319(a). As submittals are received from the facility on this project we will send copies to you for review and comments.

Attached find correspondence IEPA has had with Clark Oil to date regarding these surface impoundments including a copy of their sampling and analysis plan and a Compliance Inquiry Letter that was sent to Clark by IEPA in December, 1992. Also, please be advised that IEPA's Division of Legal Counsel will be referring this project to the State of Illinois Attorney General for enforcement. Should you have any questions regarding the above, please contact Jerry Kuhn at 217/524-3859.

Very truly yours,

Lawrence W. Eastep, P.E., Manager

Permit Section

Division of Land Pollution Control

Bureau of Land

LWE:JK/mls/271Y/63

Mary A. Gade, Director 217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

March 23, 1993

Clark Oil and Refining Corporation Attn: Mr. John T. Bernbom 131st Street and Kedzie Avenue Post Office Box 297 Blue Island, Illinois 60406

Re: 0310240005 -- Cook County

Clark Oil and Refining Corporation

ILD005109822 Log No. C-605-M-1

Received: December 23, 1992

RCRA - Closure

Dear Mr. Bernbom:

This letter is in response to the document dated December 21, 1992 and received by the Agency on December 23, 1992 which was prepared and submitted by Gabriel Laboratories Ltd. on behalf of your facility. This document was titled "Closure Documentation Report" and contained information, including analytical results, pertaining to the closure of a hazardous waste container storage (S01) unit at the above referenced facility.

This document was reviewed as a request to modify the approved closure plan due to the fact that parameters were detected in the soil for which the Agency had not yet established soil cleanup objectives. Such cleanup objectives (CUOs) are set forth in Condition 3 below. A comparison of the sampling/analysis report to these CUOs indicates that soil is present in the vicinity of the subject hazardous waste container storage area. With this in mind, the Agency hereby approves your request to modify the approved closure plan for the hazardous waste container storage area at the above-referenced facility, subject to the following conditions and modifications:

- 1. This approval letter supersedes the Agency's September 29, 1992 closure plan approval letter.
- Closure activities must be completed by October 1, 1993. When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure, or by December 1, 1993. These dates may be revised if Clark Oil and Refining Corporation finds that additional time is required to

complete all required closure activities and Clark Oil and Refining Corporation demonstrates to the Agency that it is carrying out the activities described in the approved closure plan in a timely manner.

The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the units approved for the closure herein until the Agency approves the facility's closure certification.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste, waste residue, and contaminated soil (if any) removed. The term waste includes wastes resulting from decontamination activities.
- b. Scaled drawings showing the horizontal and vertical boundaries from which contaminated soil was removed.
- c. A description of the method of waste handling and transport.
- d. The waste manifest numbers.
- e. Copies of the waste manifests.
- f. A description of the sampling and analytical methods used including sample preservation methods and chainof-custody information.
- g. A chronological summary of closure activities and the

cost involved.

- h. Color photo-documentation of closure. Document conditions before, during, and after closure.
- i. Tests performed, methods and results.
- j. Information documenting the results of all required soil sampling/analysis efforts. The goal of this presentation should be to present, in a logical manner, the activities and results associated with the sampling/analysis effort. At a minimum, such a presentation should contain:
 - Identification of the reason for the sampling/analysis effort and the goals of the effort.
 - A summary of the analytical data, including tables and all QA/QC data associated with the sampling/analysis effort.
 - 3. A scaled drawing showing the horizontal and vertical location where all soil samples were collected.
 - A description of the soil sampling procedures, sample preservation procedures and chain of custody procedures.
 - 5. Identification of the test methods used and detection limits achieved, including identification of any sample preparation techniques utilized, dilutions made and interferences encountered during the analysis.
 - Copies of the laboratory report sheets, including results of the analysis conducted on QA/QC samples.
 - 7. Visual classification of each soil sample in accordance with ASTM D-2488.
 - 8. A discussion of the data, as it relates to the overall goal of the sampling/analysis effort.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency Division of Land Pollution Control -- #33 Permit Section 2200 Churchill Road Post Office Box 19276 Springfield, Illinois 62794-9276

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3. The subject submittal references, in the copies of the laboratory analysis, 35 IAC 721.124 as the regulatory level to determine whether clean-closure has been achieved. 35 IAC 721.124 is used to determine whether a waste should be classified as a hazardous waste or as a special waste based upon the characteristic of toxicity, not whether or not soil or groundwater left in place will endanger human health or the environment.

Based upon a review of the information submitted to date regarding closure of the subject container storage area, the Agency has established the soil cleanup objectives listed below to ensure that the closure performance standards of 35 IAC 725.211 and 725.214 are met. All soil remaining beneath and around the subject container storage area must meet these objectives after all required closure activities are completed.

Soil Cleanup Objectives

	Objective
<u>Parameter</u>	(mq/1)
Barium (TCLP)	2.0
Cadmium (TCLP)	0.005
Chromium (TCLP)	0.1
Lead (TCLP)	0.0075

The analytical method that shall be utilized in confirmation sampling (Condition 12 below) for barium, cadmium, chromium, and lead is Method 1311 of SW-846 (Third Edition) (TCLP).

- 4. Based upon a comparison of the cleanup objectives with the analytical results contained in the subject submittal, it is apparent that constituents are present in the soil in and around the subject storage area at levels greater than the established cleanup objectives. Therefore, soil remediation and/or removal will be necessary to achieve the closure performance standards of 35 IAC 725.211 and 725.214.
- 5. As stated in Condition 4 above, soil is present in the vicinity of the subject container storage area which contains contaminants above the soil cleanup objectives set forth in Condition 3 above. Therefore, a sufficient number of additional soil samples should be collected and analyzed to clearly determine the horizontal and vertical limits of the soil which exceeds the established cleanup objectives in and around the hazardous waste container storage unit undergoing closure. The procedures used to collect and analyze these samples must be in accordance with those approved by this letter. The procedures used for determining the horizontal and vertical locations from which these samples must be collected shall be in accordance with Sections 13.a and 13.b of the Agency's RCRA closure plan instructions. However, no random sampling shall be used to make this determination.

which exceed the cleanup objectives in the vicinity of the additional sample locations.

- 6. The Agency must be notified in writing if, at any time, it is found that soil contamination above the established cleanup objectives extends to near the water table. This notification must be made within 15 days after such a discovery is made. A plan to investigate for potential groundwater contamination must be submitted to the Agency for review and approval within 60 days after the initial written notification is submitted to the Agency.
- 7. Background samples may be needed when the hazardous waste constituent of interest naturally occurs in soil, such as heavy metals. A few toxic organics, such as phenol or formaldehyde, may be naturally produced, but their concentrations in soil would typically be very low and near or below detection limits. Background samples are used to statistically compare the natural condition to the potentially contaminated area. Background samples should be taken in areas not affected by the hazardous waste units and by the plant itself. They may be taken away from the owner/operator's property, but should be as close as possible to the facility. Background samples should be taken from soil depths and soil horizon materials similar to those of the potentially contaminated area.

Background soil samples are not required, but if the facility desires them, then a minimum of ten (10) are required from each soil horizon of concern to establish cleanup objectives. The Agency must approve the location where these samples are to be collected and the actual analytical interpretation of the results for use as cleanup objectives.

Include in any proposal for background soil samples the following information (at a minimum):

- a. A scaled drawing(s) showing each soil sampling location;
- b. The depth of each sample, parameters to be analyzed for, and the analytical methods to be used;
- c. The procedures to be used in collecting the samples; and
- d. The statistical method to be used to analyze the data. An acceptable method can be found in Chapter 9, Table 9-1, Equation 6 of <u>Test Methods for Evaluating Solid Wastes</u>, Third Edition (SW-846).
- 8. Contaminated soil may be excavated and disposed off-site at any time during closure. The goal of any such effort should be to remove all soil which exceeds the established cleanup objectives.

- 9. If Clark Oil determines that soil excavation and off-site disposal is not the preferred remedial action for this closure, then the Agency must be notified in writing when such a determination is made. At that time, the Agency will provide Clark Oil with additional guidance regarding the information which must be submitted to the Agency for review and approval relative to the alternative remedial action which the facility would like to implement.
- 10. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722. 134) only applies to containers and tanks.
- 11. All contaminated soil which is excavated for off-site disposal must be managed as hazardous waste (EPA Hazardous Waste No. K052) in accordance with 35 IAC 722, 723, 728, and 809, as well as applicable federal regulations.
- 12. If removal and off-site disposal is the chosen remedial action for the soil contamination encountered at the subject container storage area, then soil samples must be collected for analysis from the bottom and sidewalls of the final excavation from which contaminated soil was removed. This sampling analysis effort is necessary to demonstrate that the remaining soil meets the established cleanup objectives.
 - a. A grid system as set forth in Section 13.b of the Agency's closure plan instructions must be established over the excavation.
 - b. Samples must be collected from the floor of the excavation at each grid intersection, including intersections along the perimeter of the excavation.
 - surface at each grid intersection around the excavation perimeter. Samples must also be collected at the midpoint of the excavation perimeter. intersection along the excavation perimeter.
 - d. Collection/analysis of all required samples must be in accordance with the procedures approved in this letter.
 - e. Soil samples which must be analyzed for volatile organic compounds (VOCs) shall be collected using Attachment 7 of the Agency's RCRA closure plan

instructions. In addition, such samples must be collected 6"-12" beneath the floor/sidewalls of the excavation to minimize the possibility of volatilization of the contaminants prior to the collection of the samples.

- f. No random sampling shall be conducted to verify that the cleanup objectives have been met.
- 13. If removal and off-site disposal is the chosen remedial action for the soil contamination encountered at the subject container storage area, then additional soil must be removed, as necessary, until it can be demonstrated that the remaining soil in and around the area of concern meets the established cleanup objectives. Additional samples must be collected and analyzed in accordance with Condition 11 above from areas where additional soil has been removed.
- 14. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
- 15. All references to the "Agency's RCRA closure plan instructions" refers to the document entitled <u>Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities</u>, December 11, 1990. A copy of this document is enclosed.
- 16. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 IAC 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
- 17. All samples shall be analyzed individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with the Third Edition of SW-846. When an SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. When visually discolored or contaminated material exists

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within an area to be sampled, horizontal placement of sampling location shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate that a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the Third Edition of SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15. If possible, your sampling program should be extensive enough to determine the lateral and vertical extent of contamination to the detection limit (PQLs) referenced above.

Should you have any questions regarding this matter, please contact Michael A. Heaton at 217/524-3312.

Very truly yours,

Lawrence W. Eastepwan

Lawrence W. Eastep, P.E., Manager Permit Section Division of Land Pollution Control

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Attachments:

I. Closure Certification Statement II. Instructions for the Preparation of Closure

Plans for Interim Status RCRA Hazardous
Waste Facilities (December 11, 1990)

cc: USEPA Region V -- George Hamper Richard Schmidt -- Gabriel Laboratories

ATTACHMENT

This statement is to be completed by both the responsible officer and by a registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-605-M-1

The hazardous waste container storage management unit (S01) at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

USEPA ID Number	Facility Name
Signature of Owner/Operator Date	Name and Title
Signature of Registered P.E. Date	Name of Registered P.E. and Illinois Registration Number
	< P.E. Seal >
Mailing Address of P.E.	

Mary A. Gade, Director 217/524-3300

2200 Churchill Road, Springfield, IL 62794-9276

March 19, 1993

Clark Oil and Refining Corporation Attn: Mr. Bill R. Irwin, Environmental Manager Hartford Refinery 201 East Hawthorn Hartford, Illinois 62048-0007

Re: 1190500002 --Madison County Clark Oil and Refining Corporation ILD041889023 RCRA-Closure

Dear Mr. Irwin:

The Agency has reviewed the "Guard Basin and Lime Pits Sampling and Analysis Plan" for the hazardous waste surface impoundments at the above-referenced facility. Based upon this review, the Agency has developed a list of comments that should be addressed in revising the plan. These comments are intended to create a plan that will yield results that are more useful to Clark Oil and the Agency in making decisions related to this project. This letter does not constitute an Agency approval or disapproval of the referenced submittal.

- 1. The plan should contain descriptions and diagrams of the units. The facility map is provided should indicate the locations of the units.
- 2. The waste sampling plan is very vague. Since no unit diagrams were provided, it is impossible to determine whether the proposed number of samples (30 from the Guard Basin and 15 from the Lime Pits) will be adequate to characterize the waste properly. Additionally, the plan does not clearly indicate which samples will be analyzed for which parameters.
- 3. Clark proposes to select sample locations randomly, but states that some locations that are not accessible or pose hazards to sampling personnel will be excluded. Clark gives no indication of the criteria to be used to exclude a location. In order for a random sampling plan to be successful, all locations must be included as possible sampling points.
- 4. Since no discussion of wastes managed at the facility was provided, it is difficult to determine whether the

proposed analytical list is adequate.

- 5. Soil sampling is planned only at the proposed locations of the groundwater monitoring wells. This will not be adequate to demonstrate that soil is free of contamination, or to determine the extent of any contamination detected. Diagrams of the units will be necessary to prepare an adequate soil sampling plan.
- 6. Sampling procedures do not comply with normal Agency requirements. Clark proposes compositing of some samples, which is not acceptable. Samples to be analyzed for VOCs should be collected and handled in accordance with Attachment 7 of IEPA's closure plan instruction package (copy enclosed). Since PVC can affect analytical results, the use of a PVC pipe as a sampling tube is not acceptable.
- 7. A detailed facility description and detailed history of operation should be provided in the plan. This information is useful to the Agency in determining the adequacy of several aspects of the plan.
- 8. Pursuant to 35 IAC 721 Appendix A, F037 and F038 wastes contain benzene, benzo(a)pyrene, chrysene, lead and chromium.

Groundwater Sampling (Page 6) indicates the selected parameters for groundwater analysis are Total Petroleum Hydrocarbons (TPH), lead, chromium and BETX. In so much as the wastes identified in the units contain semi-volatile organic constituents, groundwater should be sampled quarterly for at least one year for the "Skinner List" constituents found in Appendix No. 3 of the sampling and analysis plan. After one year of data has been collected, the sampling and analysis plan can be modified to measure a subset of the constituents of concern on a quarterly basis, with the complete "Skinner List" constituents being measured on an annual basis.

9. The sampling and analysis plan proposes to field filter groundwater samples.

The Agency recommends collecting both filtered and unfiltered groundwater samples for inorganic analysis for at least four consecutive quarters during the course of one year to be used for background analysis. Upon completion of background data collection, the facility can limit monitoring to filtered samples for inorganics for the routine statistical analyses. However, any evaluations regarding compliance with applicable standards shall be based on unfiltered samples.

10. Appendix No. 2 - Well Installation and Development Procedures: Item 2.n. proposes to convert the boreholes to 2" PVC monitoring wells. In so much as volatile and semi-volatile

organic constituents originating from the units may potentially be in the groundwater, all monitoring wells must be constructed using stainless steel, an equally inert material or a hybrid construction.

- 11. Appendix No. 2 Well Installation and Development Procedures: Item 3.c. indicates that the monitoring wells will be field screened. The Agency requires that all monitoring well screens be machine cut or continuously wound from the manufacturer.
- 12. Appendix No. 2 Well Installation and Development Procedures: Item 3.1. proposes for well development to bail the well until clear water is obtained. The Agency recommends developing the monitoring well until temperature, pH, specific conductance and turbidity of the groundwater become stable.
- 13. Construction details for all monitoring wells must be provided on the Agency "Well Completion Report" form (enclosed).

For your convenience, I have enclosed a copy of the Agency's closure plan guidance document. This will assist you in revising the sampling and analysis plan, and in preparing a closure plan for the units.

If you have any questions regarding this matter, please contact Mark L. Crites or Ken Lovett at 217/524-3300.

Very truly yours,

Dawrence W. Eastep, P.E. Manager

Permit Section

Division of Land Pollution Control

Bureau of Land

1/2

Enclosures - 1) Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities.

2) Well Completion Report Form

cc: USEPA Region V - George Hamper Brown and Caldwell Consultants